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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/692,502

10/24/2003

Hiroki Koyano

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CANON U.S.A. INC. INTELLECTUAL PROPERTY DIVISION
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EXAMINER

ZHENG, JACKY X

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

08/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/692,502

Applicant(s)

KOYANO, HIROKI

Examiner

Jacky X. Zheng

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 11, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on October 24, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/15/2005 & 4/10/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial office action based on the application filed on October 24, 2003 and the preliminary amendment filed on May 11, 2006.
2. Claims 1-18 have been cancelled in the Preliminary Amendment filed on May 11, 2006.
3. Claims 19-38 are pending.

Information Disclosure Statement

4. The information disclosure statements (IDS) submitted on July 15, 2005 and April 10, 2006 were filed after the mailing date of the application on October 24, 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 32-38** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With regard to claim 32-28, the claims are drawn to "a print processing control program", considered to be "a software" per se, which can be characterized as either "functional descriptive material" or "nonfunctional descriptive material". As functional descriptive material when "consists of data structures and computer programs which impart functionality when employed as a computer component"; and as non-functional descriptive material if it "includes but is not limited to music, literary works and compilation or mere arrangement of data" (See "*Interim*

Art Unit: 2625

Guideline for Examination of Patent Application for Patent Subject Matter Eligibility", ANNEX IV, Page 50). The claims are being considered as functional descriptive materials in this case. However, "both types of "descriptive material" are nonstatutory when claimed as descriptive material per se".

In addition, even considering the claim as "functional descriptive material" imparts with functionality, but not being employed as a computer component (or other physical structures), is considered as non-statutory. "In contrast, a claimed **computer-readable medium encoded with a computer program... is thus statutory.**" (See "*Interim Guideline for Examination of Patent Application for Patent Subject Matter Eligibility*", ANNEX IV, Page 53, First Paragraph;). Therefore, these two types of "descriptive material" are nonstatutory when claimed as descriptive material per se (See "*Interim Guideline for Examination of Patent Application for Patent Subject Matter Eligibility*", ANNEX IV, Page 50, Second Paragraph; & ANNEX I, Page 30;).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 21 and 22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 20 recites limitations of "form design means" and "form information". Such limitations have not been *explicitly* depicted with sufficient descriptions in the instant claim. The scope of such a limitation is unable to be determined, which renders the claim scope indefinite.

10. Claim 21 recites the limitation of “a composite form”. Such a limitation has not been *explicitly* depicted with sufficient descriptions in the instant claim. The scope of such a limitation is unable to be determined, which renders the claim scope indefinite.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 19 and 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Anderson et al. (U.S. Patent No. 6,483,999)** and further in view of **Johnson et al. (U.S. Pub. No. 2002/021454)**.

With regard to claim 19, the claim is drawn to an information processing apparatus that outputs document data, comprising means for displaying, selecting, setting and generating a halt command. Anderson et al. disclose an invention relates to “a combination printer/copier” apparatus which is capable of triggering the interrupt sequence. Anderson et al. further disclose the limitations of: a display (see Anderson et al., i.e. Fig. 1, 22) as the displaying screen, a keypad (Fig. 1, 24) as means for selecting, a copy button (Fig. 1, 25) as the setting means for initiating the interrupting or halting command, a print controller (Fig. 2, 19) as the means for generating the interrupt sequence (or halting command) and generating of the print job, and image forming devices, such as inkjet or dot-matrix impact printer for example, as the outputting means.

With regard to claims 23 and 24, the claims are drawn to an information processing apparatus according to claim 19, further requiring the process of halting to be initiated by either a user or upon a expiration of a specific time period as claimed in claim 23; and capability of halting either the print job for specific page or the print job as a whole as claimed in claim 24. In addition to the teachings disclosed by Anderson et al. indicated above, the prior art further discloses “the interrupt sequence queries the user for the interrupt copy job parameter...the user accepts the default setting and initiates the interrupt copy job by depression of a single button...” (see Anderson et al., i.e. “Abstract”, lines 3-6); and further discloses that the control signal could also be rely upon the parameters, such as “approximate time left, etc.” (i.e. column 2, lines 60-64). In addition, Anderson et al. disclose displaying of the job status, such as number of page remaining and etc. for providing user feedback (i.e. column 2, lines 61-63), and also allow the print job to be cancelled or interrupted at a specific “point” (or at specific page) or “simply automatically cancel the interrupt job” (i.e. column 3, lines 13-17).

Anderson et al. do not explicitly disclose the limitation of “the halt command is inserted into the specific page selected form the document data”.

However, Johnson et al. disclose an invention relates to the printing control involves detection of “backchannel data”, and further utilize the information of presence or absence of a requesting command for “backchannel data” as the control signal for interrupting or halting control of printing processing (see Johnson et al., i.e. Paragraphs [0037]-[0038] and [0040] – [0042]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Anderson et al. to include the limitation of “the halt command is

inserted into the specific page selected from the document data” taught by Johnson et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Anderson et al. by the teachings of Johnson et al. to include the limitation of “the halt command is inserted into the specific page selected from the document data” taught by Johnson et al. to “make it possible for a printer to accommodate fast cancellation of print jobs, even when some print jobs request backchannel data” (see Anderson et al., i.e. Paragraph [0042]).

With regard to claim 25, the claim is drawn to a print processing control method of outputting document data having the *substantially identical* limitations recited and discussed in claim 19 (*The claim is rejected under the same ground for at least the reasons set forth above. See the detailed discussion of the claim 19 above. Furthermore, in Anderson et al., the method is also being claims, i.e. in claims 13-14 of Anderson et al.*).

With regard to claims 30 and 31, the claims are drawn to a print processing control method of outputting document data having the *substantially identical* limitations recited and discussed in claims 23 and 24 respectively (*The claims are rejected under the same ground for at least the reasons set forth above. See the detailed discussion of the claims 23 and 24 above.*).

With regard to claim 32, the claim is drawn to a print processing control program of outputting document data having the *substantially identical* limitations recited and discussed in claims 1 or 25 (*The claim is rejected under the same ground for at least the reasons set forth above. See the detailed discussion of the claim 1 above.*).

With regard to claims 37 and 38, the claims are drawn to a print processing control program of outputting document data having the *substantially identical* limitations recited and discussed in claims 23 (or 30), and 24 (or 31) respectively (*The claims are rejected under the*

Art Unit: 2625

same ground for at least the reasons set forth above. See the detailed discussion of the claims 23 and 24 above).

13. **Claims 20-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Anderson et al. (U.S. Patent No. 6,483,999)** and further in view of **Turpin et al. (U.S. Patent No. 5,745,712).**

With regard to claims 20-22, the claims are drawn to an information processing apparatus according to claim 19, further comprising “form design means”, “a composite form”, “a form configuration of the document data in a tree structure” and etc. See the detailed discussions of the limitations required for the base claim of these dependent claims above.

Anderson et al. do not *explicitly* disclose the limitations of “form design means”, “a composite form”, “a form configuration of the document data in a tree structure” and etc.

However, Turpin et al. disclose a system for creation and completion of “goal oriented electronic forms” that creates a graphical image data file which defines a graphical image of a form for display and printing (see Turpin et al., i.e. “Abstract”, lines 1-3; column 2, lines 34-41), and further disclose “a graphical image of tree branches, tree nodes and conclusions in association with fields of the form (see i.e. “Abstract”, Figures 24-26).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Anderson et al. to include the limitations of “form design means”, “a composite form”, “a form configuration of the document data in a tree structure” taught by Turpin et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Anderson et al. by the teachings of Turpin et al. to include the

Art Unit: 2625

limitations of “form design means”, “a composite form”, “a form configuration of the document data in a tree structure” taught by Turpin et al. over the advantages, such as “define logical and/or mathematical operations which implement goal oriented prompting within a form...” (See Turpin et al., i.e. column 2, lines 36-41).

With regard to claims 26, 27 and 29, the claims are drawn to a print processing control method of outputting document data having the *substantially identical* limitations recited and discussed in claims 20, 21 and 22 respectively (*The claims are rejected under the same ground for at least the reasons set forth above. See the detailed discussion of the claims 20-22 above*).

With regard to claims 33, 34 and 36, the claims are drawn to a print processing control method of outputting document data having the *substantially identical* limitations recited and discussed in claims 20 (or 26), 21 (or 27) and 22 (or 29) respectively (*The claims are rejected under the same ground for at least the reasons set forth above. See the detailed discussion of the claims 20-22 above*).

With regard to claims 28 and 35, the claims are drawn to a print processing control method and program according to claims 25 and 32 respectively, and further require “a form design application” and etc. (*See Turpin et al., i.e. claims 24-27 for further disclose of application software for creating “forms”*).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2625

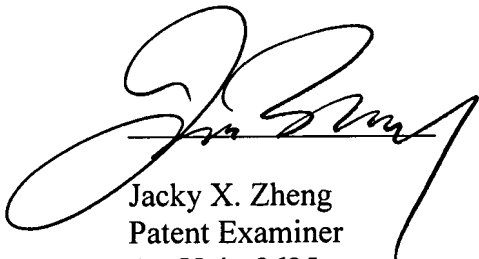
- A. Lester et al. (U.S. Pub. No. 2003/0053110) disclose an invention relates to a printer is responsive to user input to cancel print jobs that are received after the user input.
- B. Maekawa (U.S. Pub. No. 2003/0030836, Canon) disclose an invention relates to an image processing apparatus having an interrupting function for interrupting a print job which is being processed by an interruption job inputted from an external apparatus or a processing method of interrupting the print job which is being processed by the inputted interrupted job.
- C. Blom et al. (U.S. Pub. No. 2004/0099166) disclose a method of managing a print system in which print jobs are disposed with a print queue or “acting-object”, is provided within the print queue to behave as a separate job.
- D. Yano (JP 2000-132347 A, Ricoh, a machine translation is provided and attached herein) disclose a method of a print job of plural pages is divided into the print job for the respective pages, each being managed for the respective pages and efficient printing is realized.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacky X. Zheng whose telephone number is (571) 270-1122. The examiner can *normally* be reached on Monday-Friday, 7:30 a.m.-5p.m., Alt. Friday Off.

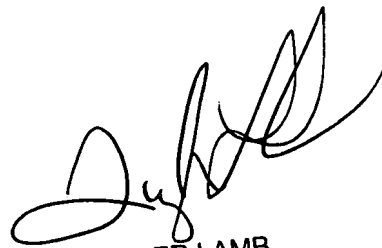
If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jacky X. Zheng
Patent Examiner
Art Unit: 2625
August 6, 2007



TWYLER LAMB
SUPERVISORY PATENT EXAMINER